PEUCEDANUM KYRIAKAE (APIACEAE), A NEW SPECIES FROM CYPRUS

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Abstract
Peucedanum kyriakae (Apiaceae), from Cyprus belonging to sect. **Peucedanum** is described as a species new to science. Its relations with other species are discussed and ecological data about its habitat are given.

Keywords
Apiaceae, *Peucedanum*, new species, Cyprus.

Peucedanum kyriakae (Apiaceae), , sect. **Peucedanum** .

The genus **Peucedanum** L. sect. **Peucedanum** is represented in Cyprus for the first time by the new species **Peucedanum kyriakae**. Previous records referring to the presence of ***Peucedanum veneris*** Kotschy (Unger et Kotschy, 1865) and ***Peucedanum ostruthium*** (L.) Koch (Sibthorp, 1806), are rejected by HOLMBOE (1914) and MEIKLE (1977). Relatives of **Peucedanum kyriakae** *n. sp.*, outside of Cyprus are **Peucedanum spreitzenhoferi** Dingler from the mediterranean Middle East as well as **P. vittijugum** Boiss. from Balkan Peninsula and **P. arenarium** Waldst. et Kit. known from S. Czechoslovakia to Turkey and S.E. Russia.

PEUCEDANUM KYRIAKAE Hadjikyriakou & Alziar, *species nova.*
TYPUS : Lemesos Main State Forest, Fountanoudi locality, north of Parekklisia village, Lemesos district, 550 m altitude, 27-V-2000, G. Hadjikyriakou 5070,

(Herbarium Hadjikyriakou) ; 7 **isotypes** : CYP, NICE, P, and Herbarium Hadjikyriakou). (Fig. 1).

Paratypes : same locality, 500 m altitude, 19-IV-1993, G. Hadjikyriakou 1417 (NICE) ; same locality, 22-VI-1993, G. Hadjikyriakou 1433 (NICE) ; same locality, 6-VIII-1998, G. Hadjikyriakou 3671 (NICE) ; same locality, Fornifaria-Prastio road, 500 m altitude, 17-IV-1999, G. Hadjikyriakou 4400 (NICE) ; same locality, 12-VI-1999, G. Hadjikyriakou 4640 (NICE, Herbarium Hadjikyriakou).

Planta perennis, 30-80(-100) cm alta. *Caudex* pleurumque divisus ad apicem, coronatus collari vaginis vestigiis. *Caulis* farctus, rotundatus, striatus, glaber, plerumque superne ramosus. *Folia basis* 20-30 cm longa cum petiolorum ; lamina bipinnata, ambitu anguste oblonga usque ad deltata, 8-18 x 6-14 cm ; segmenta primaria usque ad 12 ; lobi 5-15(-25) mm longi, ovati vel oblongi, divisus in liniares vel oblanceolati, leviter falcati, integri vel bi-trifiti lobi ; apex ultimorum segmentorum acutum cartilagineo mucrone. *Folia supera* diminuta gradatim sursum. *Folia superrima* utiliter deminuta ad vaginas. Umbellae terminales et laterales ; radii (2-)4-8, glabrae, uniquales. Bracteae 0-(1). Radii secundarii (5-) 10-25 floribus. Bracteolae 3-8, subulato-lanceolatae, interdum squama similem. Sepala absentia. Petala interne alba, extra suffusa purpura. Fructus oblongus, ovatus usque ad obovatus 4-6 x 3-4 mm; cristae dorsales filiformes sine alatis, laterales contigue alato margine, ala circum ¼ latitudis mericarpii, purpurata vel pallida ; vallecullae 1-vittatae ; vittatae extensae deorsum basim mericarpiorum.

Erect perennial herb 30–80(-100) cm high. Rootstock usually divided at apex, crowned with a collar of sheath remains. Stem solid, rounded, striate, glabrous, usually branched above. Basal leaves 20–30 cm long including the petiole ; lamina 2-pinnate, narowly oblong to deltoid in outline, 8-18 x 6-14 cm ; primary segments up to 12 ; lobes 5-15(-25) mm long, ovate or oblong, divided into linear or oblanceolate, slightly falcate, entire, 2-fid or 3-fid lobes ; apex of ultimate segments acute with cartilaginous mucro. Upper leaves gradually diminished upwards. Uppermost leaves usually reduced to sheaths. Umbels terminal and lateral ; rays (2-)4-8, glabrous, unequal. Bracts 0(-1). Raylets with (5-)10-25 flowers. Bracteoles 3-8, subulate-lanceolate, sometimes scale-like. Sepals absent. Petals white internally, tinged purple externally. Fruit oblong, ovate to obovate 4-6 x 3-4 mm ; dorsal ridges filiform, unwinged, the lateral contiguous with the winged margin, wing about ¼ the width of the mericarp, purple or pallid ; valleculae 1-vittate ; vittate extending down to the base of the mericarps.



Fig. 1 : **Peucedanum kyriakae** *n. sp.*, holotypus.



Fig. 2 : **Peucedanum kyriakae** *n. sp.* in the typical locality, Cyprus.

Taxonomic relationship

Peucedanum kyriakae belongs to sect. **Peucedanum** and it does not seem to be very closely related to the other species of this section. In Cyprus there are no other species of the genus **Peucedanum**. Previous records refer to the presence of ***Peucedanum veneris*** Kotschy (UNGER et KOTSCHY, *Die Insel Cypern*: [302], 1865), from Kouklia and Geroskipou area and ***Peucedanum ostruthium*** (L.) Koch (***Imperatoria ostruthium*** L. : SIBTHORP, *Flora Graeca Prodromus 1* : [199], 1806), from Trooditissa Monastery. These records are rejected by HOLMBOE (*Studies on the vegetation of Cyprus* : [138], 1914) and *MEIKLE (Flora of Cyprus 1* : [758], 1977). Regarding ***P. veneris*** Kotschy, they conclude from the description, that Kotschy refers to **Cachrys crassiloba** Boiss. A visit of co-author G. Hadjikyriakou in the area W of Kouklia, showed that **C. crassiloba** is locally common (specimens : Kouklia, 1996, Hadjikyriakou, 1918 and Kouklia-Asprokremmos Dam, 1998, Hadjikyriakou, 3709). So, Holmboe's and Meikle's opinion, that ***P. veneris*** is actually **C. crassiloba** Boiss. is confirmed. About ***P. ostruthium*** (L.) Koch (*Imperatoria ostruthium* L.), HOLMBOE (1914, op.cit.) and MEIKLE (1977, op. cit.), believe that it is almost certainly an error, for the plant dose not grow in the E. Mediterranean, and has not since collected in Cyprus. Therefore, with **Peucedanum kyriakae** *n. sp.*, the genus **Peucedanum** L. sect. **Peucedanum**, is represented in Cyprus for the first time.

Relative of **Peucedanum kyriakae** *n. sp.*, outside Cyprus is **Peucedanum spreitzenhoferi** Dingler which lives from Syria to southern Israel, by its general look ; however the flowers are yellow and the ultimate divisions of the leaves are clearly toothed and their apical mucron is longest ; moreover in **P. kyriakae** *n. sp.* the basal leaves are present at the flowering time. Relatives also but again with yellow flowers are : **P. vittijugum** Boiss. from Balkan Peninsula and **P. arenarium** Waldst. & Kit. known from S. Czechoslovakia to Turkey and S.E. Russia. Among the other distinctive characteristics one remarks that in the former the rays of the umbells are more numerous rays, 10-20 against 4-8 in **P. kyriakae** *n. sp.*, and in the later, the bracteoles are 8-10 (only 3-8 in the new species).

Geographical distribution and ecology

Peucedanum kyriakae *n. sp.*, is probably endemic of Cyprus. It was located at Fountanoudi locality of Lemesos Forest, north of Parekklisia village, within the administrative boundaries of Prastio village, Lemesos district, at 450-550 m altitude (Fig. 2). The rocks consist of pervasively serpentinized, tectonized harsburgites with minor dunites and iherzolites, of the Troodos ophiolite rocks.

An area of about 15 km^2 was investigated and it seems that its population is restricted within an area of 0,5 km^2. It occurs in small groups usually along roadsides and in rocky slopes of north-east aspect. The predominant species are: **Pinus brutia** Ten., **Genista fasselata** Decne., **Cistus creticus** L., **Cistus salviifolius** L., **Lavandula stoechas** L., **Alyssum chondrogynum** B.L. Burtt, **Asphodelus aestivus** Brot., **Urginea maritima** (L.) Baker etc. It flowers from mid May to the end of June.

IUCN status and threats

From the investigations curried out so far **Peucedanum kyriakae** *n. sp.* seems to be one of the rarest endemics of Cyprus and, according to the IUCN Red List Categories and Criteria, it is categorized as CR (Critically Endangered): B1a + 2a + C1. This means that it is known to exist at only a single location and the number of mature individuals is less than 250. Potential threats are : forest fires, prolonged drought, reforestation works, road construction and maintenance.

Etymology

This plant is dedicated to the wife of co-author G. Hadjikyriakou, Mrs. (Latinized Kyriake), who consistently participates in all his botanical explorations.

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Dear reader,

In the last issue of the journal Biocosme Mésogéen (23-4), the greek abstract of the article of G. HADJIKYRIAKOU and G. ALZIAR has been lost. You will find it below :

Peucedanum kyriakae (Apiaceae), , sect. **Peucedanum** .

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Also in page 182, line 18, the name " " is missing.

We apologize for this error.